

**Amendments to the Specification:**

Please amend the title as follows:

**A COMPOSITE MAGNETIC HEAD INCLUDING INSENSITIVE REGIONS ON ENDS  
OF A MAGNETORESISTIVE FILM**

Please add the following **new** paragraph after paragraph [0034]:

FIG. 6 is a constitutional view of a magnetoresistive head, as viewed from a medium opposing surface, according to another embodiment of the present invention.

Please replace paragraph [0035] with the following amended paragraph:

[0035] The following table includes a description of reference numerals.

|             |                                                        |
|-------------|--------------------------------------------------------|
| 1           | Magnetoresistive head                                  |
| 2           | Substrate                                              |
| 3           | Lower magnetic shield                                  |
| 4           | Magnetoresistive film                                  |
| 5           | Upper magnetic shield                                  |
| 6           | Separation layer                                       |
| 7           | Inductive magnetic head                                |
| 8           | Lower magnetic layer                                   |
| 9           | Upper magnetic layer                                   |
| 10          | Conductive coil                                        |
| 11          | Anti-ferromagnetic layer                               |
| 12          | Pinning layer                                          |
| 13          | Protection layer                                       |
| 14          | Free layer                                             |
| 15          | Non-magnetic layer                                     |
| 21a,<br>21b | Electrode overlaid layer (first<br>electrode layer)    |
| 22a,<br>22b | Hard magnetic layer (magnetic domain<br>control layer) |
| 23a,<br>23b | Side shield                                            |
| 24a,<br>24b | Main electrode layer (second electrode<br>layer)       |
| 26a,<br>26b | Crystal orientation control underlying<br>layer        |
| 27          | Lower gap layer                                        |
| 28          | Upper per gap layer                                    |

Please replace paragraph [0039] with the following amended paragraph:

[0039] FIG. 1 shows a 5-layered structure, since it adopts the minimum film constitution but it may be also sometimes designed such that a crystal control layer is disposed under the free layer 14, oxide layers are disposed above and below the free layer 14 or the pinning ~~pinning~~ layer 12 for enhancing the spin-valve effect, another magnetic layer is stacked or a low resistance film such as made of Cu is disposed below the free layer 14 for controlling the center of biasing current in the direction of the film thickness. Further, the spin-valve structure also includes a bottom spin-valve structure in which the anti-ferromagnetic layer is disposed below and, further, a dual spin-valve structure in which anti-ferromagnetic layers are disposed by two upper and lower layers.

Please replace paragraph [0054] with the following amended paragraph:

[0054] FIG. 3(d) depicts a form in which portions on the left of the conductive layer 21d and on the right of the conductive layer 21d ~~[[21b]]~~ are completely removed as far as the free layer 14, but it is actually difficult to completely remove the entire region in the plane of the substrate uniformly. Depending on the case, a form in which alumina is etched (over-etching) causes no practical problem.

Please replace paragraph [0055] with the following amended paragraph:

[0055] Then, as shown in FIG. 4(a), crystal orientation underlying layers 26a, 26b as the hard magnetic layer, as well as hard magnetic layers 22a, 22b, 22c an intermediate layer 25, side shield layers 23a, 23b, 23c and main electrode layers 24a, 24b, 24c are deposited. The angle of irradiation of deposition particles is set so as to be vertical to the surface of the substrate. Thus, the side shield layers 23a, 23b can be formed while placing the hard magnetic layers 22a and 22b on the sides of the free layer 14 and performing magnetic domain control on the free layer 14.

Please replace paragraph [0062] with the following amended paragraph:

[0062] Further, since the low sensitivity region on both ends of the free layer can be made into the insensitive region, the embodiment of the invention can provide a structure capable of basically solving the disadvantage caused by current shunting to the low sensitivity region. One such embodiment is illustrated in FIG. 6, which shows non-magnetic regions 100 provided on both ends of the anti-ferromagnetic layer 11. The remaining layers in FIG. 6 are similar to those in FIG. 1, and they share the same reference characters.